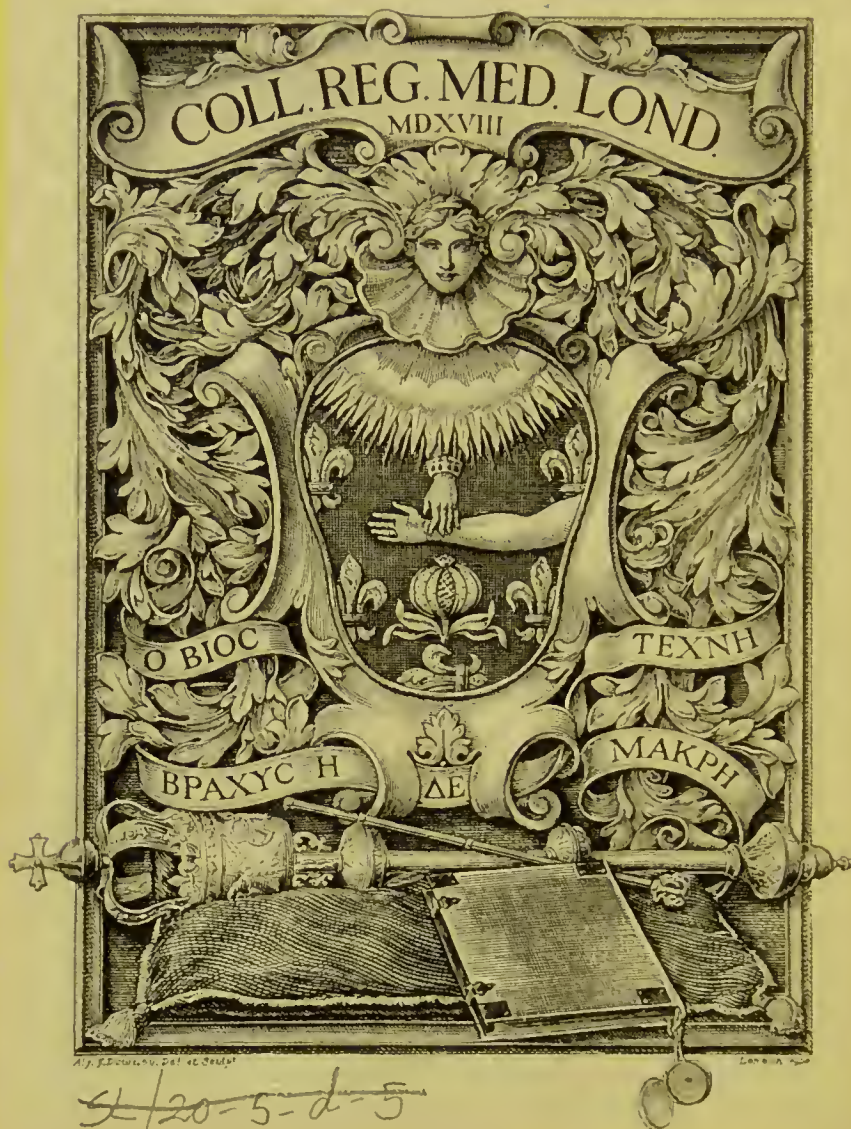


VOCATION
OF THE
MEDICAL SCHOLAR

DR. RICHARDSON

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THE
VOCATION OF THE MEDICAL SCHOLAR:

BEING THE ORATION

DELIVERED AT THE EIGHTY-THIRD ANNIVERSARY

OF

THE MEDICAL SOCIETY OF LONDON.

BY BENJAMIN W. RICHARDSON, M.D.,

Fellow and a Fothergillian Gold Medalist of the Society; Physician to the Royal Infirmary for Diseases of the Chest, and to the Metropolitan Dispensary; and Lecturer on Forensic Medicine at the Grosvenor Place Medical School.

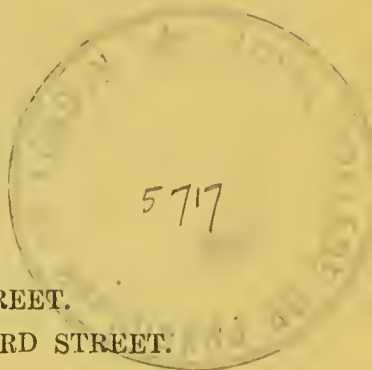
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TO

JOHN SNOW, M.D.,

LATE PRESIDENT OF THE MEDICAL SOCIETY OF LONDON.

MY DEAR SNOW,

I offer but a poor compliment in dedicating these few thoughts to you, and beg that you will accept the goodness of the will as compensation for the deficiency of the deed.

Your simple, earnest life, as a man of true science, is known to none better than to myself. You have laboured long, successfully, and in the fervent spirit of self-sacrifice, at some of the deepest problems connected with the phenomena of life—the first and noblest of all intellectual pursuits; and the world may one day recognise the extent and value of your exertions as fully as I do now.

In a word, you are a true representative of the Medical Scholar; and your labours are their own reward.

I am, DEAR SNOW,

With much esteem,

Your affectionate Friend,

BENJAMIN W. RICHARDSON.

12 Hinde Street, Manchester Square,
April, 1856.

THE VOCATION

OF

THE MEDICAL SCHOLAR.

MR. PRESIDENT AND COLLEAGUES,—Time, rolling on in vast indefinite wave, and in proud contempt of the various checks in shape of scored taper, sand-glass, and Geneva machinery, which we in our ingenuity have at various periods put upon it, has brought us, the Fellows of the Medical Society of London, again into friendly communion. The labours of another session past, the fervent debate for the moment forgotten, we stand here once more in the stern presence of the *edax rerum*, to celebrate this our eighty-third anniversary.

Thus says the old chronicle: “At a meeting of the Medical Society of London, held on Tuesday, January 18th, 1774, the Anniversary Oration on the best method of improving medical knowledge, and of promoting the intentions of the Society, being pronounced by Dr. Sims, the Society unanimously desire it may be published, to which Dr. Sims agrees.”

A fine speculative study for the imaginative mind it would be, to review this extended pass of time, and to consider in relation to our body what it has achieved therein; what impulses it has given to the progress of medical science; what silent but certain reforms it has introduced; what loving and lasting friendships it has kindled; what labouring hearts it has cheered by its rewards to merit and industry. A fine study it would be, I repeat, to review our past in these lights, but one too extensive and speculative for the present occasion.

Since the time we last met together thus greetingly, an eventful year has passed away—a year more eventful than may be soon again expected, and one which will of necessity stand out as a time-mark in the grand cycle of history. In the course of the

events of this year, the science of medicine has not been inactive. She has furnished her heroes and her historians abroad, her political and scientific labourers at home, and, in all the phases of her destiny, has never stood in fairer or greater promise before the world.

The institution of an order of medical men for the sanitary supervision of the metropolis; the possibility that this institution may be extended to the whole kingdom; the prospect of a new and extensive measure of medical reform; the concessions tardily, but at last made to naval medical officers; the improvements which have taken place in army medical appointments; and last, but not least, the completion of the noble and philanthropic conception of our esteemed fellow, Mr. Probert, in the inauguration of the Royal Medical Benevolent College—these are all hopeful indications which need but be named to claim our earnest appreciation.

In the proceedings of our own Society—microcosm of the great society of the world—we have rung our changes. We have modified and centralised our system of government, for the better, it is to be hoped, though some may be allowed to doubt. Any way, we are now hale and hearty; and although the longevity of societies, like that of man, is a doubtful question, we may consider the Medical Society of London yet in its prime, though full of days and honour.

We have to regret the loss by death of five of our valued colleagues—Dr. Chambers, Mr. Harwood, Mr. Copeland, Mr. Walsh, and Mr. Pilcher. In all these we have lost men ever anxious for science and the social welfare of their race. In the last one named we have a nearer, and, therefore, a deeper loss. A warm and generous friend in our personal concerns; a staid, constant, and liberal adviser in our councils; an active and earnest promoter of our scientific interests; a thorough representative of an English gentleman—in all these traits stood George Pilcher pre-eminently amongst us. The recall is painful, and bears but such slight touch of expression as shall indicate that our recollections are fresh and enduring. The irrevocable fact is so—our weary one is at rest.

In considering what I should say to you on this occasion, I have reflected on various texts, so to speak, on which to hang a few remarks, having a more useful and abiding tendency than any historical recapitulation of our own sayings and doings, or

than mere complimentary phrases, which may be melodious enough at the moment, but which leave no solid impressions behind. I have felt it indeed not less a responsibility than an honour to be elected thus to stand where the brightest, the ablest, the most beloved representatives of our common science have stood before in claims so much fairer than mine; and, in accepting thankfully this distinction, I have thought it would ill become me on the occasion to offer up any other thoughts than such as should show that the task has been undertaken with earnestness and candour at least. I have taken, therefore, as a fitting theme, the VOCATION OF THE MEDICAL SCHOLAR—a title not altogether mine, but borrowed in great part from one Fichte, whom it is unnecessary to more than name.

By the general term “Scholar,” I for one understand, not the mere classic grubbing out and retaining an immense vocabulary of words from languages called somewhat improperly *dead*; nor yet him learned in angles and lines and mystic formulæ; nor the pedantic historian with his head full of antiquities, descents, royal lineages, or the minute details of great fights and dismal plots; but the man who tries to grasp the meaning of the universe in which he dwells, past and present, as one great whole—indivisible, however dimly seen;—the man who accepts the phenomena of this unit as facts, each alike important when observed in its fulness;—the man who reads a language in everything—in the rushing torrent, in the murmur of the summer breeze, in the accents of his fellow-men, wherever and however pronounced;—who acknowledges in his own senses a unity of purpose and of principle;—who comprehends this nature and its truths so far, that to him the rustling of the forest leaf and the volley of the thunder-cloud are equal wonders;—who, putting full faith in the innate powers of intellect, foreshadows the time when matter shall be the absolute servant of mind, and who believes that such knowledge as tends to accomplish this great end is the goal to which the eye and the step of the learned should be constantly directed.

With this estimate of scholastic duties before him, the true Scholar marches on his way. Then, in whatever path of science or knowledge he may be thrown, its requirements become more clear, its objects more widely comprehended, its study more

liberal and impressive. Then, in the labours either of details or of aggregates, he makes no error in supposing that he can discover one natural fact greater than another, or that any appearance which he thinks he has seen, but which is contrary to universal laws, and which implies a dislocation, an accident, or contradiction in nature, can be other than a delusion of his own. Then, if in his thoughts and tasks any new idea, any new observation flits across his mind, he rests not until he has tested its truth, not only by examining into it as an isolated something, but by finding whether it is compatible with nature altogether, and is attuned to the harmony of the world.

And, if in every sphere of life broad views of the Scholar's true vocation are required, in medicine surely such views are demanded with double emphasis. For, in medicine, no knowledge, however wide—no fact, small or great, should pass unheeded. Bound up more or less with the history of all time, with the languages of all nations, with the phenomena of all the outward world, with the phenomena of that inner existence or force which thinks and dictates, with the teachings of that Supreme wisdom and will whence all proceeds, and into whose infinitude all must return, the science of medicine is limitless in its meaning, and endless in its labours.

In the course of its progress as a science, it may have its systems and its dogmas innumerable, changing with the ages and the men; but the science itself—the essence—based as it is on the laws primitive and instinctive, that life is sweet, and disease a misery for which relief must be sought by means foolish or wise—this essence, I say, is a part of Nature herself, is coeval with intelligence, and lasting as man.

To the honour of this truly natural science, it can be said that amongst those who have cultivated it, the purest representatives of the Scholar have appeared. In all the paths of scholastic knowledge on which the eye of the historian can rest, the Medical Scholar can be detected wending his laborious way, often as the first to point out some new track leading to unknown lands, fertile and useful.

Does any one wish to recall the idea of him who first pointed out how the external agencies by which man is ever surrounded—these winds and rains, and clouds and sunshines—affect and influence him in his physical and mental states? There first in

history stands Hippocrates, writing this knowledge in imperishable sentences. Is it wished to call into remembrance the scientific labourers who first described what man really in himself is; how his exquisite machine of a body is fashioned and moved? Vesalius, Harvey, and a hundred more stand in view, wrestling these secrets from Nature, and detailing them to the world. Should it be asked, who in clearest form of expression brought out the science of thought itself? The name of Locke gives the answer to the question. Shall it be inquired who the men were who first tore Nature's formulæ into elementary pieces, and explained the attributes of these elements? Priestly, Black, and Thomson, to say none else, stand forth. Would the natural historian desire to look back for those who have most extended his domain of thought and knowledge? The figures of Linnæus and Hunter rise majestically before the gaze. Or, lastly, would the social reformer wish to be told who, in plainest, most honest, and unselfish manner, has most laboriously tried to unravel the difficult web of political economy? I appeal to all whether I may not in truth reply, a Medical Scholar, by name Joseph Hume. Thus, in medicine, we have had our true Scholars, of whom we may well be proud.

But it may be argued that these men, and many others of like class, having been endowed with peculiar mental gifts, would have been equally great in any other department of life; that their connection with medicine was but an accident, or that they were not Scholars in the broad sense of that term, as I have defined it.

I have but little to say on these points. If a man become truly great in any station, the inference is, that the man is suited to the work, and even made for it; for the higher faculties of the mind will not be driven into obedience. If the same man shall perform any remarkable scholastic feat, which other men, for the time and afterwards, identify as a leading truth springing from him, the inference is that this man was really a Scholar in the highest degree; for the phenomena of the world of Nature are so intimately linked together, that they cannot well be isolated or studied in parts strictly independent of each other. If, therefore, in the labours of the Scholar, his knowledge or his genius shall appear at one point only, it may be fairly assumed, at least, that within himself there was treasured the useful learning of his

time, even though (which is rarely the case) his writings fail to give indirect evidence that the fact was so.

With some men, the Vocation of the Scholar is a part of themselves; they are born to it. The position, however, which such men attain, is not always the true one. They are, as others, the children of fortune. They may be the shunned of this world; they may be its demigods.

If one man own as a birthright great physical powers, and another man a weak, and, perhaps, misshapen development of body, our judgment regarding the physical capacities of the two men is easily summed up. We can admire the strength and freedom of the first, we can pity the imperfections of the second. But because we can appreciate, by our very senses, that the causes of these differences of capacity are mechanical, and are beyond the control of the men themselves, we draw no unfair deductions on either side. The facts are indisputable: the one man is stronger than the other, but they are as they have been fashioned, and that is everything that admits of being said.

But when we turn from physical to mental prowess, we get into a deeper problem—we flounder, we argue unjustly, and our deductions, as it shall happen, may be wise, foolish, considerate, or cruel. It is difficult to detect true mental power, for it appeals not to the senses specially; it acts on things unseen, and by virtue of agencies out of range. If it is very great, it may be beyond the reach of belief, and may thus lie unnoticed for a season—may not be understood in the lifetime of its possessor, may even be lost altogether. On the other side, a small and continued noisy, or a cunning and persuasive exhibition of mental faculty, backed up by accident, may excite a profound astonishment, and attract a host of admirers.

Thus, I say, in judging of mental power, we may be both false and inconsistent. Possessing no correct standard by which to make a correct estimate; mistaking, sometimes, noise for force, and cunning for wisdom, biassed by feelings which appeal to our intenser faculties—our likes and our hates—our prejudices and our sympathies—we allow ourselves, on the one hand, to expect from some men efforts, powers, thoughts, deeds of which they are not more capable than a dumb man is of speaking; while, on the other hand, in sheer and wearied dissatisfaction at not having

impossible expectations realised, we grow at length sceptical as to the existence of great mental strength at all; overlook it when it is most obvious; and, groping on in blind discontent, put our hands by mere accident on the mental levers by which the world intellectual is moved.

Once again, if, perchance, we do place a hand on one of these living levers, if a mental Hercules or a living Buddha in knowledge do present himself, we are given to commit an error deeper than before. The sceptic feelings at once drop dead to the bottom of our hearts, and belief rises to the top—but belief all concentrated in this newly discovered wonder. Straightway we run wild in our ecstasies. There is no Allah but Allah, and Mahomet is his prophet. The arguments that the man is strong, because he cannot help it, and that there are many more in the same position, are ignored. We lose ourselves in admiration of the man; we measure no other men by him, but we condemn other men by him freely enough without measurement. We take in all that he says, however much he may be wrong. We hunt him out in his daily life: we take his habits, which may be most commonplace, for models; we catch at his sayings, which may have been said before and better, for proverbs; he is at once a teacher, a dictator, a leader; he has—to use the language of his grand-salaam, hats-off, retiring-backward worshippers—he has no rival in his department.

Meanwhile, such other strong men as are willing and able to compete with this giant are made to stand aside. The most that the mass will permit is, that the said strong men, being handsome servitors, shall, by a grand stretch of generosity, become priests in the temple of the great one. If an objection is made to this, the objector is a doomed man. He is seen to be presuming, ambitious, deluded, ignorant. His very strength is his weakness in the estimation of the world, which is busy in forging an idolatry system of its own, of which the main point of faith is—whoever doubts, let him be heretic.

I have made a chaos of this description of the varying positions of great Scholars; but in this I have merely sketched out chaotic things as they are, and in the confusion in which they naturally present themselves.

At the same time, I wish in no way to be understood as treating with slight men who are endowed by Nature with distinguished

powers, but as simply opposing living hero-worship, which I, for one, from heart hate, and look on as a degrading and degraded spectacle—as unworthy alike of the Scholar and his Vocation—as the palsy-stroke of independent and manly progress—as the falsifier of history—as the heart-breaking executioner of many an earnest soul. I believe that in the world mental strength is as equally distributed as physical, with which, indeed, it is in many senses allied. I feel certain, that if the true Vocation of the Scholar were fully understood, this equality of power in the mind would stand manifest and acknowledged, and that there would then be no possibility of hero-worship—seeing that men will not fall down before their equals, and that where there are many to be admired, there are fewer to offer admiration.

Hence the possession of faithful ideas regarding the Scholar and his duties is of leading interest. I shall try, to the best of my ability, to trace out a few thoughts on this subject in relation to medicine.

The Vocation of the Medical Scholar embraces many parts. In his sphere, this Scholar is a teacher, an arbitrator, and a perpetual student in the Academy of Nature. The value of his teaching depends on the extent of his studentship, the value of his arbitration on the wisdom with which he applies his daily increasing knowledge. There can be little mistake on these points, for they are facts, which we in our daily lives are constantly repeating. We are accustomed to hear and to make the remark, that such a man is very shrewd, and has immense natural talent, or common sense—that is the most likely word—but that he is deficient in acquired knowledge; while, of another man, the observation goes round that he is blessed with every sense except common sense. In these sayings, we give simple expression to the sentiment which our exquisite poet Cowper thus breathes forth in philosophic verse:—

“ Knowledge and Wisdom, far from being one,
Have oftimes no connection. Knowledge dwells
In heads replete with thoughts of other men ;
Wisdom in minds attentive to their own.
Knowledge, a rude unprofitable mass,
The mere materials with which Wisdom builds,
Till smooth’d and squar’d, and fitted to its place,
Doth but encumber whom it seems t’ enrich.
Knowledge is proud that he has learn’d so much ;
Wisdom is humble that she knows no more.”

The true Esculapian Scholar, therefore, takes it as a part of his Vocation to unite such knowledge as he may obtain with such wisdom as he may possess. However great his intuitive strength may be, he feels it a duty to conjoin with it the experiences of other minds; for, as in the physical body there are muscles which move *nolens volens*, and still other muscles which move under the guidance of the will and by imitation, so in the mind there are powers involuntary, which must have their own way, and other powers voluntary, which respond to education, and are subservient to the dictation of their possessor.

The Vocation of the Medical Scholar is one strictly of observation, and of pure reason based on such observation; that is again to say, of knowledge and wisdom; for observation means knowledge, and reason is another word for wisdom.

But his sphere of observation, how vast it is—how beyond all description difficult, laborious, exacting! So wide is its scope, that often something that shall influence it most lies for some ages quite out of its reach. If any man were to rise and proclaim, as he might in truth, that there is but one science as there is but one Nature, he might further say, taking as a centre the science which embraces most in the way of observation and fact, that the one and true science is medicine. We indeed unconsciously claim this unity, when we call ourselves physiologists; for physiology meant originally, and still means, the law of Nature universal.

But it is to be regretted that we are not always alive to this breadth of our science; that we are too apt, like the philosophers prior to Columbus, to suppose that the world we know of is the only world extant; nay, that we even go further backwards, and, like the philosophers before the time of Copernicus, are wont to invent an imaginary tortoise and elephant in the shape of systems, and to place our world upon them, heedless of the basis upon which the said mystic animals themselves may be footed.

These men-invented systems are the evidence ever of a limitation of the Scholar's duties; and when one hears of any man having made a system of his own out of Nature, whether that man be Broussais or Hahnemann, there is but one construction to be put upon the announcement—*the man is wrong*. We may invent systems of government, or of cards or bagatelle, for these are of ourselves, and of the earth earthy; but beyond this bare humanity,

go we cannot. In the matter of Nature and her works we can only observe, note down her ways, test her by herself, and then, if she have any system, we may at last see it, but no more—it must then be really seen to be received, and must be found to be permanent before it can be adopted as a truth.

Hence all humanly invented systems die out inevitably and disappear; they are not from the beginning—they are not for the infinite; or, to use the words of a writer who ever speaks truthfully, “Whatever is born of time is the child of time, and is born, and lives, and dies at its appointed day, like ourselves.”

It is thus a part of the Medical Scholar’s Vocation, while he avoids the invention of systems, to tie himself down to observation; to investigate Nature, not to model her after his own east of thought; not to attempt to go before her, but to follow her humbly, earnestly, patiently; not to invent for her, but to see how she has invented. Whoever does more than these things fritters away his life, to deceive, possibly, the present generation by his mysticisms or plausibilities, but to be detected of a certainty at last, as a deluded man at least, perhaps as an impostor.

To reduce what I have here said to our daily scientific concerns, leads direct to the consideration of what is called *theory* and *practice*. Ominous words these, badly understood, and dangerous withal. In their common and rude acceptance, the Medical Scholar should have none of them. They lead to endless confusion. Taking them as they are commonly employed in medicine, they seem to convey the idea that there is one order of medical learning which deals in speculations, and another which deals in facts. A mockery all this, a solemn unmistakeable mockery; for by what scientific right does any one speculate on any natural phenomenon, when the phenomenon itself lies open for explanation without any speculation whatever? If insuperable difficulties surround the problem, let them be admitted, but let not guesses be therefore conjured up to over-ride them. On the other side, if the phenomenon be itself laid bare in all its parts, what more can the practical man require? Is it not the supremacy of practical knowledge to know a thing as it really exists?

But in medicine we rarely recognise arguments of this character. We have placed before us some remarkable feature in Nature, some great physical catastrophe, perchance involving the lives of thousands; and at once we divide ourselves into two sects, the one

sect speculating on what the fact may be, the other looking at it barely as a fact in mute astonishment, or dealing at it certain wild blows, which may either be purely at a venture, or, as is most commonly the case, may be made at the dictation of some old speculation, which has long been known to have originated in visions indefinable.

With the true Medical Scholar this division of thought and action is unknown. His Vocation is all practical, whatever the world may say and think of him or his works.

The speculator thinks there is a kind of midway or exercise ground between absolute ignorance and absolute knowledge in science. The Scholar knows there is nothing substantial of the kind. If he, the Scholar, is asked for an explanation of any given phenomenon, he either says, "it is so and so, and thus it is so simply proved that you who are asking can prove it for yourselves if you will;" or he honestly says, "the fact is as you see it; there is as yet no explanation; certain guesses have, it is true, been made about it, but these are neither safe nor profitable—they may be right, but they are more possibly wrong." For his own part, he will rather die unknowing, and feeling the difficulty beyond his reach, than invent mystical fancies, terms, or explanations regarding it, which might perchance mislead for a season, and bring him to certain obloquy at last.

The Medical Scholar who dares to look Nature in the face, and to speak of her only as he finds her, must bring into play a degree of moral courage and endurance not common to all nor pleasant to many. For it is a remarkable, and, I had almost said, a laughable fact, that a Scholar of this class is sure, for a time at least, to be doubted, possibly derided. The speculators consider him sceptical—the so-called practical doers take him for an innovator or upstart, who is never so happy as when he is grubbing up some pet theory on which their practice is based, or in asking them for unanswerable whys and wherefores regarding their acts and deeds.

Should he dare to advance anything new, worked out in his own rigid way, his difficulties are almost insurmountable. For it is his business to instruct—not after the hypothesis reading-made-easy system of modifying and shaving down facts to meet and dovetail with opinions—nor yet after the *ipse dixit* reading-made-easier principle of the dogmatist—but by the absolute demonstra-

tion of truths, to the senses by illustration, and to the mind by argument.

I draw out this sketch of a true Medical Scholar from no imaginary data—that were indeed a scandal to me at this moment. There is before me, as I speak, the life history of the greatest Medical Scholar whom time has brought forth. That Scholar is William Harvey, a countryman of our own, to our honest pride be it said. Through all the phases I have drawn out, Harvey passed. His works in themselves are much less remarkable than is the way in which he set about and performed them. It has been common to call Harvey a theorist—he was the very opposite. It has become a byword that “he was not a practitioner;” he was, in truth, the soundest practitioner who has ever appeared.

So little, indeed, was this great master inclined to hypothetical pursuits, that had a less perfect brief on the various abstruse facts regarding the circulation been placed before him than that which he received from Fabrizio and other preceding anatomists, it is doubtful whether he would have at all investigated that problem which he so completely solved. But it was Harvey’s destiny to throw aside speculation, and simply to observe. There had been speculators too many on the subject of the circulation before his time. It was his business to silence them all, and on that score he was none the better liked. The beautiful hypothesis of the tides of the Euripus, and of the invisible pores through the septum of the ventricles, were to him but so many old wife’s fables, fairy tales, moon thoughts. So, in his business-like manner, he fitted only together such absolute facts as he could collect, and thus built to himself a simple monument of fame, which lasts, and must last, by virtue of its truth and very simplicity.

The speculators fled, to allow the practical workers, so called, to take the field against this man. To the credit of their valour, and the discredit of their understanding, these held it doggedly to his death. It is nonsense to suppose that so rigid an observer as the circulation discoverer could or would believe in the rottenness of routine, in the efficacy of a hanged man’s old bones, or in the sure and certain virtues of album Græcum. So the occasion arose for a wretched quack to say, “that he would not give twopence for one of his (Harvey’s) bills (prescriptions), and could not understand his therapeutique way.” We pity the imbecility of this miserable punster now: he was thought to have made a hit then.

The true Vocation of the Medieal, like that of the general Scholar, leads him to espy and know, not only the oneness of Nature, but the equality of her phenomena, or manifestations. It is neither his sole business to spend his days in surveying her vaster appearances, nor in inspeeting through a microscope her infinitesimal parts. But from the high to the low, from the small to the great, his vision ranges, in so far as it is eapable. What or who is he, that he should draw an estimate of the greatness or the littleness of the works of the Supreme! He can but measure either by his own limited eapacity; and when he brings into play the element of wonder, he can neither deteet differencees, nor mete out distinetions.

If, in the width of his range, he observe any new faet whether small or great, he notes it down faithfully; and when he is assured of its truth, he makes it known to all, that some other one coming afterwards may have the advantage of it, and may test its real worth. It is not vanity that prompts the Scholar to describe what he has seen, but honcsty and duty.

In thus eulogising the line of research which treats of faets, their deteetion and announcement, I would not, however, be understood as advocating the hard principle of binding down the impulses of imagination, or limiting the deep glimpses of genius into hidden things. I do not even wish to say one word against hypothesis, in its legitimate meaning and application. I know that hypothetical reasoning may be in itself of the highest value, when it is used simply in the eduction of a truth, and is cast freely to the winds after its office is fulfilled. What I oppose is the substitution of a bare hypothesis, without any shadow of fact, for fact itself. I know that hypothesis, used as a means to an end, has done at times the greatest service in science. It is clear that in astronomy, hypothetical argument has been tried, and found of infinite worth; and that Kepler, to take a solitary example, would never have discovered the ellipsc of the planetary system, had he not tried after an hypothetical eentre until he found the real one.

But it is a known and lamentable truth, that the Medieal Scholar has never, except in the rarest instanecs, used hypothesis in the same experimental, instrument-like manner. For my own part, I find rather, in my communion with the medieal world, that its members too frequently confound experiment with hypothesis. We hear it said continually of men who follow experimental in-

quiries, that they are hypothesists, or theorists, as though, perforce, they must be so because they are experimentalists. The mistake is egregious, though not over wonderful; for the truth lies in the statement, that in medicine, experiment, as a general rule, is turned into hypothesis, and not into fact. This is the reason, and none other, why medicine is not a fixed science.

To say that the laws of life and of death are not fixed laws, is to forswear the stability of the universe. They are fixed and unalterable, as surely as are the laws which govern the earth in its course round the sun; and if so, they afford the elements of a fixed science, and in this light ought to be studied by him whose business it is to inquire into them.

Let us not deceive ourselves on this point, or find fault with Nature for being capricious or erratic, when the wandering spirit is in our minds. This was the folly of the old astronomers, when, in their difficulties regarding the laws of the heavenly bodies, they gave to those bodies hypothetical properties, powers, and forces, which we laugh at in this day, and call astrological absurdities, and many other hard names.

Nothing more strongly indicates how widely we in medicine are given to diverge from real, practical, and inductive science, than some of the technical terms we commonly use. The people are wont to say that they cannot understand us, and that our learned expositions do not appeal to their common sense. This is little to be wondered at; for how often does it not happen that we do not understand each other, and that our modes of expression indicate a sad want of soundness in our argument? Such vague terms, as "hidden seizures," "sympathies," "irritations," "revulsions," "crises," "antiphlogistics," "nervous exhaustions," and others familiar to our mouths—what do they mean? What are they worth? Where are the two men who shall give to them the same definition? What other science would foster, or even permit, such ragged phraseologies? They are the darkest spots in our literature, and it is the bounden duty of the true Medical Scholar to wipe them clear away from the tablet of his memory. There may seem at first sight to be little in a name, or word, or expression. It is not so. In science, words, names, and expressions invariably indicate thoughts, and, therefore, cannot play a neutral part. They either advance or obstruct. They are

either foolish or wise ; and as they are, so are the thoughts which they represent.

In our Vocation as observers of disease and ministers of health, it becomes us as Scholars to strive, not only after facts, but also after the eduction of great and leading laws ; not such laws as we in magnificent ingenuity, or in wild poetry of science, can invent, but such as, by solemn and wearisome research, we can show to have been written by supreme Nature herself. I think I am not far wrong in making the general confession, that out of all our collection of details, gathered from time immemorial, we have never as yet eliminated so much as one great and fundamental law relating to diseases as a whole : I mean, no such law as shall be said to run parallel with the physical law of gravitation. This deficiency arises not from any want of industry, talent, or enthusiasm in the medical world, nor yet from difficulties comparatively greater than those which are met with in other sciences (for surely no problem was ever more abstruse than that of gravitation) ; but because the studies of the Medical Scholar have rarely, until these last years, been based on the inductive and observing processes, and because it is common, in the way of error, to accept hypotheses as explanations of phenomena, to trust to empirical or accidental discoveries for solid progress, and, in heaping details together, to pile them in veritable confusion, as though they were intended to serve no ultimate purpose, nor to be subjected to any form of arrangement. Still further, it has been made a custom—and customs are not thrown on one side in a day—to split up the greater phenomena in medical science into infinitudes of parts ; and there have been men, such as Cullen, who have positively gained great and favourable notoriety by artificially and unhesitatingly dividing the very elements of disease into as many mere verbal forms, as there are symptoms or effects springing out of elementary causes—a pursuit than which none other could more decidedly give origin to weak and mistaken opinions, or lead more directly away from the construction of an exact science.

If it be asked, how medical inquiries should move, in order that medical philosophers may approach towards fixed principles ? I answer, by investigating more rigidly the laws through which healthy functions are controlled and enforced ; by closing for once,

and for good, the present book-made divisions of diseases; by culling out, on the exclusion process, the elementary forms or types of diseases; by inquiring whether the types of disease are not resolvable, in every case, into simple exaggerations or deficiencies of the natural or physiological actions of life; by hunting down symptoms to their sources, and by classifying them in pure physiological order; by rejecting all speculations on the supernatural, as supercomprehensible; and by labouring in solemn acknowledgment of the fact, that whatever life may be, as an abstract principle, its manifestations are embraced in a few grand and elementary chemical and physical processes.

That a line of research, based on these principles, has not been as yet fully established in medicine, results rather from unavoidable causes than from any intentional errors, either of will or of judgment, on the parts of medical inquirers. The retarding cause is explained in a sentence:—Medicine has had to wait for the coming up of the other sciences. Astronomy tarried for optics. Medicine has tarried for chemistry. It was only in the birth-year of this Society that the second, nay the first, food of man, common oxygen, was discovered. Prior to this discovery, how, in Egyptian darkness, must they who speculated on life, health, disease, have groped their way! How they moved at all seems now the greatest marvel. But this is the order of progress. Man is dependent on man, science on science. The rule is unbroken. Nature is one.

It is a part of the Vocation of the Medical Scholar to try all things that are in science offered to him, and to hold fast those which are good, and to deny or ignore no reasonable statement, implying a new discovery or fact, until he has seen and proved that the statement is in itself a misstatement, or is opposed to other laws which have been proved to be fixed, and which are indisputable. Still more, it is his duty, in conducting his own inquiries, to act the independent man; and, while paying every due deference to the judgment of those who have preceded him, not to let it so warp and weaken his own observations, as to check his freedom of thought, and clog his own career. I say this for the simple reason, that there have been even great men, who, after discovering leading facts, which time has set its seal upon as facts, have in their own lives doubted their own discoveries, and have

stopped short at a point where their most important labours should have begun. A well known illustration, bearing on this point, is afforded us in the case of the distinguished Black, who, after discovering the products of respiration, hesitated, and, as if doubting his own realisation, said and did no more on the subject.

Macaulay, in one of his forcible and exquisite passages, has defined the man of original and influential thought as one "having much hope, little faith, a belief that nothing extraordinary ever has been done, a conviction that anything extraordinary may be done"—a summary, descriptive of bold originality, which cannot be more profoundly expressed. It pertains not to many to possess moral courage and genius of this high cast; but it is open to all to act with due independence, and to prefer the teaching of Nature herself to that which is supplied by her exponents, however learned and far-seeing they may be.

A due regard to truth, to the welfare of science, and to his own ultimate honour, should at all times prevent the true Scholar from drawing hasty conclusions from insufficient data, and from thrusting opinions, which may even in the end be correct, unripe before the world. This is true of scholastic research in general, but doubly so when such research is applied to medicine; inasmuch as any trip in this science, tending to mislead, not only brings the science into disrepute, but affects deeply the happiness and the prosperity of the world.

Could that erratic genius, Cullen, have seen how long physiological medicine was doomed to be embarrassed, embroiled, and obstructed by a wild, unproven, foolish observation of his, about the brain being the source of the animal temperature, he would have wept at his own rashness. Or could John Hunter have foreseen the discussions innumerable, and pitiaibly imbecile, which have arisen out of a mystical, unmeaning, or perhaps accidental or ill expressed thought of his, "that two diseases cannot exist in the same body at the same time," he, dogmatic as he was, would have repented painfully the statement.

These dogmatic, haphazard speculations are, in a word, the most dangerous of all dangers in medicine, be their source what it may, while the amount of mischief they may produce is in direct ratio to the greatness of the men from whom they proceed.

The subject here briefly noticed leads me to think and say a

sentence or two in reference to the character and study of Medical Literature. This topic is one of deepest interest to the Medical Scholar. For they are facts which need but be named to be acknowledged, that an immense amount of labour is lost, an untold measure of literary and scientific ground is retraversed, an incredible degree of old originality (the term is correct) is being daily held up to the admiring world; and all this simply because the literature of medicine is in the wildest state of chaos, and is, comparatively speaking, unread and unknown.

When the medical literature of the past is ever rooted out, the labour is undertaken, as a general rule, either to serve the purpose of some captious critic, burning with anxiety to break the midnight slumbers for six months or more of some self-satisfied new discoverer, by proving to said discoverer, black upon white, that his discovery is old as the pyramids; or else to assist some pedantic author in making his book look learned, in which case the titles of the ancient folios, dotted down in terrific foot-notes, make a most classical garnish, and confer a truly Attic flavour.

It is all very grand this, very alarming to easily affected minds, very pretty to antiquarians, very foolish to men of the every-day world, very sound and wholesome to pedants with long faces and heavy steps; but it is a poor recognition of literature when all is said and done—a pretence, I take it, the letter without the spirit.

What is literature? Is it not man himself in the intensest, the subtlest phases of his life? Do not his deepest thoughts conceive it, his firmest hands write it? Let the literature of an age be given, and the age itself is revealed, is brought again into existing time, is revived, and is made to speak once more. LITERATURE IS THE UNDYING MAN; it is the first and last exception to the general rule, that “whatever is born of time is the child of time, and is born, and lives, and dies at its appointed day, like ourselves.”

But literature, whether general or medical, can never be understood in all its variety and completeness by mere eccentric or piecemeal exhibitions, by scraps upon scraps, and these repeated over and over again. Neither can it be fully comprehended through occasional reissues of ancient authors in modern literary garments. Take it to pieces, and what then is it? It is one

great volume simply made up of various essays on various subjects. The book does not require to be dipped into here and there, and to be reprinted in parts, but to be analysed as one great whole. The winnowing machine of the reviewer is the want in medical literature at least. Much of this literature in every age is chaff, and not less so in this; much of it in every age is grain which would bear replanting, and would bring forth fruit a hundredfold.

The analytical task thus referred to lies strictly within the domain of the Medical Scholar; but for the labour implied a phalanx of such Scholars is required, whose business it would be to gather up the facts in medicine, to trace out their origin, their course, their influence, and their real value, with incidental reference only to men and their books. What is there new under the sun in the medical world? That is the question.

Finally, in regard to literature, let the modern Medical Scholar bear ever in his mind the proverb of antiquity, *littera scripta manet*; so that, when in the future he is weighed in the critic's balance, the sentence may be—he hath done all things well.

In his Vocation the true Medical Scholar forms an intimate alliance with the world in which he lives. The society of the learned, the good, the industrious is, it is true, his happiest sphere; but in every other he moves also freely, independently, honestly, candidly. The ignorant are to him no precious prey, on which a greedy soul may feast. He hates ignorance, but he cannot walk away from it, because it is a part of his business to assist in its expulsion. Of all things, again, he abhors mystery, cajolery, or deception. What has he in his sphere to conceal? Is medicine such a craft, juggle, and sham, that it must be kept a solemn secret? Has it such glaring deficiencies, and, like honest pilgrim, such a load of sins on its back, that it had better be removed from the gaze of the vulgar, lest they, in their wanton rage, might put it under Lynch criticism, and laugh it to scorn? By no means; it is but the charlatan who fears those things, his own evil heart prompting the terror. Knowing that men of all classes are open to error, that medicine is in no way freed from error, that it partakes with the age of the infirmities of the age—knowing all this, I say, the Medical Scholar confesses it all, and will be first with his own hands to tear down the white from the sepulchre. But

why? Not because he loves his profession the less, but because he loves the truth most, and because he would see that profession which he loves well based on that principle which he loves best.

We are sometimes accused by the world of being prejudiced, and of being bound to certain dogmas, set phrases, systems, and ceremonials. We are not alone in this position; for no body of men were ever yet banded together for the most sacred objects without having similar inuendoes thrown into their teeth. But we feel these reproaches the more frequently, because they are the hues and cries of quacks, as every one knows.

Let a selfish, shallow, ambition-crazed German palm on the world, with great noise, a defunct dogma, and promise to cure all diseases by thrusting nothing under heaven in the pretence of something potent over earth, down the throats of deluded suffering men; and when the monstrous foolery of the system and the practice is repudiated by the stern and clear common sense of the medical body, the impostor at once makes market of the repudiation, and by heavy and groaning appeals to honesty, justice, and such like homely requests, which go to the heart rather than the intellect, he positively wriggles his way into a kind of silly position, and founds a system which, being of the lowest human, is, of course, temporary and trumpery.

Or let another man start on no system at all but sheer impudence, falsehood, and the invention of some absurd nostrum; and lo! he finds it a splendid advertisement to open the campaign, and to keep it open by attacks on the doctors, who, for their parts, do not think him worthy of regard either for good or for evil.

These attacks the Medical Scholar must bear. They will never injure his position if he meet them in the right way; and the right way is that which shall lead him to be candid in regard to his own deficiencies, laborious in filling them up, and honest and earnest in protecting that which he knows and feels to be true.

In the performance of these duties is hidden, indeed, the morality of medicine; and thus moving onwards through life, the Medical Scholar, whether considered in his universal or individual capacity, must in the end conquer, and stand approved. The simple faith of his science is the sign of the simple faith of his whole being. Mysteries he has none to unfold to a favoured few; secrets, not one

to carry to the grave. The great living world is this man's priest, the illimitable space his confessional ; and if the book of his life were closed but for a moment, he would wish it blotted out for ever.

In the career of the Medical Scholar, there are, again, many duties which relate to his bearings and dispositions towards others of the same Vocation. On this theme, however, involving as it does the subject of medical ethics, I shall not long dwell. The perfection of medical ethics, indeed, as I take it, is embodied in one or two general or natural laws, and in no set system of rules, artificially framed in the closet by earnest men, *who have their own opinions*. In what has preceded, I have tried to point out that, in the scientific career of the Medical Scholar, there are required a unity and simplicity of purpose, a willingness to cast off false impressions whenever recognised, and a determination to receive and acknowledge freely every useful assistance that may come within his reach. In his social relations, let but the same feelings and principles actuate and guide the man, and all is well. His ethical code is a part of himself, and appears in every phase of his life and deeds.

A word more, and I have done. While yet the cannon of the first Napoleon were proclaiming sorrow, terror, and desolation to every German home, in the university of the ancient city of Erlangen, there stood one day, in solemn, unmoved repose, the distinguished man from whom, as I before said, the title of this oration is borrowed. Around him, in breathless silence, sat tiers of spell-bound listeners, to hear, in the thunder of eloquence, far more lasting than the conqueror's noise, the Scholar's duties thus epitomised by the Scholar himself:—

“ To me also, for my part, is intrusted the culture of my own and following ages. From my labours will proceed the course of future generations—the history of nations who are yet to be. To this am I called—to bear witness to the Truth. My life, my fortunes, are of but little moment ; the results of my life are of infinite moment. I am a priest of Truth ; I am in her pay. I have bound myself to do all things, to venture all things, to suffer all things for her. If I should be persecuted for her sake, if I should even meet death in her service, what great thing is that I shall have done ? What but that which I clearly ought to do ? ”

In all that I have said on the impulse of this occasion, I have but expressed, in feebler words and more diluted thoughts, the grand lesson thus grandly defined. It is even so. In the world of knowledge as a whole, in the world of medicine as a part of that whole, TRUTH—its defence, its advancement—includes, in one sentence, the beginning, the midway, the end of the Scholar's Vocation.

THE END.



